

The Effect of M-Banking Security on Interest in Online Shopping in the Civitas Academica of Maritime Economics and Business Faculty, Raja Ali Haji Maritime University (UMRAH), Indonesia

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Abstract: The growth of technology seems endless. All aspects of life today cannot be separated from technology. The world of trade is where one of them comes from, with many traders selling their goods online. Selling online must, of course, be supported by good service and easy payment. The development of financial technology, such as m-banking, also contributes to the ease of payment. Not only in terms of convenience, but security is also a factor that drives interest in online shopping. This research is aimed at determining the impact of m-banking security on online shopping interest. This research uses a quantitative correlational method with a sample size of 92 respondents. Data collection techniques use primary data collected through questionnaires. This research suggests that m-banking security has an effect. significantly influence online shopping interest.

1 INTRODUCTION

The expansion of technology and information is endless. Technology is omnipresent in every aspect of life today. The convenience of all human activities is greatly enhanced by this progress, so technology cannot be avoided. Technological advances in the world of commerce also seem not to want to be left behind by many entrepreneurs whose business is to sell products or services online because selling online does not require a physical store that requires rental fees, Therefore, entrepreneurs can set market strategies by reducing product prices to make them cheaper but with good quality. Supporting online selling requires excellent customer service, such as selling products in accordance with what is offered and making the payment process straightforward. According to (R. D. Irahyani, 2022), In the theory of consumer behavior, it is explained that consumers consume to meet a satisfaction, so consumer satisfaction with our products is the main reason for increasing interest in online shopping. The emergence of stimulation after seeing a product is what leads to buying interest according to (K. Philip, 2013). Someone becomes interested in buying a product so that it can be owned. The income of entrepreneurs will increase with an increase in shopping interest,

which will also have a positive impact on economic growth. Interest in shopping online is certainly influenced by the services provided and the ease of the process. The development of financial technology, one of which is mobile banking, can also provide this convenience.

Now that conventional banks have begun to develop their services into the world of technology and information, one of the bank's efforts to participate in the development of technology is to issue a service known as mobile banking. The purpose of mobile banking is to make transactions effortless for customers. The bank developed mobile banking, which is commonly known as m-banking, to make banking activities easier for users. M-banking is a bank service that can be easily accessed via smartphone (O. J. Keuangan, 2015). Therefore, m-banking can greatly facilitate customers in making transactions; transactions can be done very flexibly; there is no need to come to the bank directly because all things that are usually done at the bank directly can be done with m-banking using a smartphone. Of course, with this development, we will greatly save energy and time by not having to go to the bank directly.

Despite the convenience of customers making these transactions, there are certain things to keep in mind. The use of PINs and mobile numbers in m-banking can lead to crimes like mobile phone theft,

mobile number hijacking, and cloning mobile numbers. Of course, this raises concerns about security when using m-banking (O. J. Keuangan, 2015). The interest of customers in choosing m-banking as a tool to facilitate transaction activities is definitely impacted by this concern. Customer trust lies in the security that guarantees transaction activities. (M. Lallmahamood, 2007). Therefore, users need a guaranteed security system.

The results of security research have a significant impact on online buying interest, as tested by (A. Sutedjo, 2021). According to (R. Furi et al., 2020), it was found that security affects buying interest, but the results of research from (I. P. Baskara et al., 2012) found that security results do not affect purchasing decisions through social networking sites.

Therefore, based on the background described above and the differences from the results of previous research, we chose the title "The Effect of M-Banking Security on Online Shopping Interest".

2 LITERATURE REVIEW

2.1 Interest in Online Shopping

According to (M. Mukhtisar et al., 2021) interest is an abstract process of the soul which expresses itself in all modes of activity. Some objects are considered valuable so that they are known and desired, which results in a strong desire for something. The emergence of stimulation after seeing a product is what causes a person to become interested in buying a product to own it, as per (K. Philip, 2013).

According to (Ahmadi dan Hermawan, 2013) online shopping or e-commerce, involves buying goods or services from sellers operating via the internet. Merchants have been trying to set up online shops and sell products to consumers since the advent of the internet.

According to (A. Ferdinand, 2006), put forward 4 indicators that influence buying interest as follows:

1. Transactional interest, namely someone who leads to a product.
2. Referential interest, namely people who recommend products to others.
3. Preferential interest, to determine someone's interest which can be described through behavior that has a primary preference for a particular product. This can change preferences if something happens or changes with product preferences.
4. Explorative interest, describes the behavior of a person trying to explore a product by seeking

information that supports the positive side of the product.

2.2 Definition of M-Banking

According to (O. J. Keuangan, 2015), mobile banking allows customers to carry out banking transactions using mobile phones. Applications that can be installed by customers can access mobile banking services through the SIM (Subscriber Identity Module) menu and USSD (Unstructured Supplementary Service Data). Mobile banking is easier to use than SMS banking, because the customer does not need to remember the format of the text message sent to the bank or the banking zip code.

2.3 M-Banking Security System

According to (M. Lallmahamood, 2007) security and privacy are customer beliefs about the assurance of business security and the protection of personal information. According to (Harahap, A. Khairil, 2009) mobile banking uses 2 types of security systems, including:

1. Cryptographic system

This system is known as a password system, of which there are 2 types, namely symmetrical and asymmetrical. The weakness of the symmetric cryptography system is that the key can be sent to the recipient and allows someone else to crack it halfway. The weakness of the asymmetric cryptography system is to reduce the amount of data transfer due to adding code.

2. Firewall System

A firewall is a system that prevents unauthorized access to protected areas of corporate workstations. But the firewall system cannot prevent the entry of viruses or interference by the company.

According to (R. Arasu dan V. Annamalai, 2017) security indicators include two things, namely:

- a. Security Guarantee

When the security guarantee is acceptable and meets expectations, customers will be willing to disclose personal data and buy with a sense of security because they don't have to worry about data misuse and perishable data transactions.

- b. Data Confidentiality

Data confidentiality is very important because other people can take your data and cause harm to the people who have it. Therefore, the confidentiality of consumer data is very important.

3 RESEARCH METHODOLOGY

The design used in this research is quantitative-correlational. To identify relationships between two or more variables without attempting to change them, quantitative correlation research is utilized. There are two variables in this research, namely the independent variable (m-banking security) and the dependent variable (interest in online shopping). The UMRAH Faculty of Economics and Maritime Business was the focus of this research, which consisted of 1,025 academics. Meanwhile, the sample collection uses a purposive sampling method based on certain criteria. The criteria are as follows:

- a. M-Banking users
- b. UMRAH Maritime Economics and Business Academic Community

Based on a population of 1,025 and an error rate of 10%, the number of samples that can be calculated is as follows:

$$n = \frac{1.025}{1 + 1.025(0,1)^2}$$

$$n = \frac{1.025}{1,125}$$

$$n = 91,11$$

The data collection technique used is primary data collected through questionnaires. The questionnaire contains statements related to the research variables in a 1–5 Likert scale measurement format. Before this research questionnaire was delivered to respondents, it had first been tested and declared valid through validity and reliability tests. After the respondents were collected, the results of the questionnaire were tested using the classical assumption test, the correlation and regression test, and the t test.

4 RESULTS AND DISCUSSION

4.1 Result

4.1.1 Classic Assumption Test

Normality Residual Test

In the residual normality test using a graph showing the residuals are normal, the points on the graph spread along a line following a diagonal line.

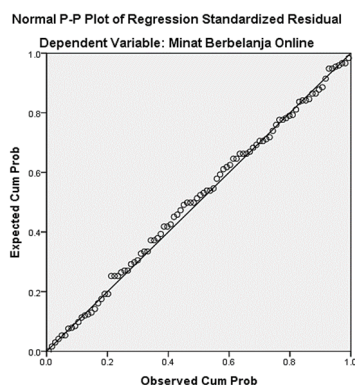


Figure 1.

Autocorrelation

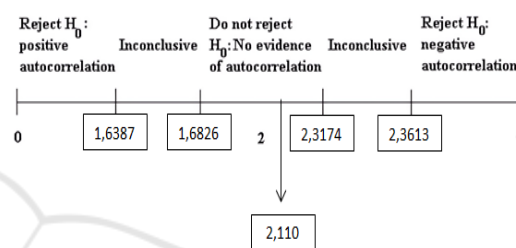


Figure 2.

The Durbin-Watson autocorrelation test is in the area of "no evidence of autocorrelation" or there is no autocorrelation.

Heteroscedasticity

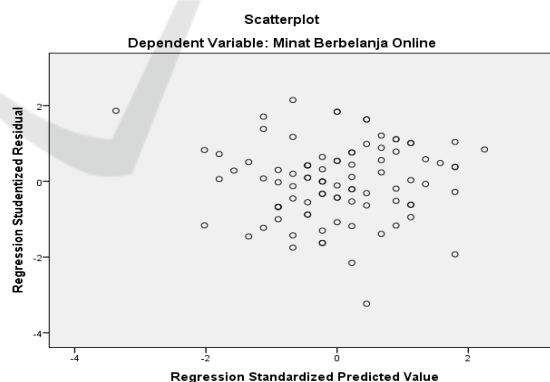


Figure 3.

This test showed no heteroscedasticity. The spreading points in the result are irregularly patterned and spread below and above the number 0 on the Y-axis.

4.1.2 Regression Analysis

Coefficient of Determination

| Model Summary | | | | | |
|--|-------------------|----------|-------------------|----------------------------|---------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | .413 ^a | .170 | .161 | 3.103 | 2.110 |
| a. Predictors: (Constant), m-banking security | | | | | |
| b. Dependent Variable: interest in shopping online | | | | | |

Figure 4.

The output of the summary model found an R number of 0.413, and the R number found a sufficient relationship between m-banking security variables and shopping interest. Then, for R Square, it was found that the contribution of the influence of m-banking security variables on online shopping interest was 0.170, or 17%, while the remaining 83% of other variables were not contained in this model. Then in the adjusted R square, we found a value of 0.161, which shows the influence of the independent variable on the dependent variable by 16.1%. Then, in the standard error of the estimate, the value is 3.3103. So 3,103 errors in predicting online shopping interest.

T Test

| Coefficients | | | | | | |
|--|--------------------|-----------------------------|------------|---------------------------|-------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| | | 1 | (Constant) | 13.333 | | |
| | m-banking security | .314 | .073 | .413 | 4.297 | .000 |
| a. Dependent Variable: interest in shopping online | | | | | | |

Figure 5.

The output generated from the coefficient table using a simple linear regression equation with 1 independent variable is $Y = 13.333 + 0.314X$, and if the m-banking security value is 0, then the interest in online shopping is 13.333. Then for every increase in m-banking security by one unit, it will increase online shopping interest by 0.314 units and also from this coefficient table, a t test was carried out, where the results obtained were: if the value of t calculating m-banking security is greater than the t table ($4.297 > 1.9867$) and the significance is less than 0.05

($0.000 < 0.05$), then H_0 is rejected, so we can conclude that **m-banking security affects online shopping interest.**

4.2 Discussion

Based on the test results above:

Trusted security services, maintained personal data, ease of knowing security measures, and concern for the importance of m-banking service security are all responsible for the influence. This makes users feel comfortable while shopping, and a sense of comfort can increase interest in shopping online.

This influence is also caused by the way this online shopping payment is done without meeting directly with the seller, and to use the payment method, users must enter personal data. Without strong payment security, this is very prone to data leakage. If that happens, of course, interest in shopping online will decrease. The increase in interest in online shopping requires strong m-banking security, which will also strengthen economic growth.

The results of this study support previous research by Sutedjo, A. S. (2021) and Furi, ., R., Hidayati, N., & Asiyah, S. (2020), which showed that security partially affects online shopping interest. However this contradicts research conducted by Baskara, I. P., Hariyadi, G. T. (2012), showing different results that security has no effect on online purchasing decisions.

5 CONCLUSION

The correlation between m-banking security and online shopping interest is 0.413% according to the output. The coefficient value between m-banking security and shopping interest has a sufficient relationship. So if m-banking security increases, interest in online shopping will also increase, and vice versa. And based on the calculated t value of m-banking security which is greater than the t table ($4.297 > 1.9867$) and the significance is less than 0.05 ($0.000 < 0.05$) so we can conclude that m-banking security influences online shopping interest in the civitas academic of the faculty of maritime economics and business.

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